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## PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional)

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Application Number

09/942,921

Filed

Aug. 31, 2001

First Named Inventor

Takatoshi Nakajima

Art Unit

2645

Examiner

Chow

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

applicant/inventor.

assignee of record of the entire interest.

See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.  
(Form PTO/SB/96)

attorney or agent of record.

Registration number 32,635

Signature

Typed or printed name

703-787-9400

Telephone number

Nov 14, 2005

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required.  
Submit multiple forms if more than one signature is required, see below\*.



\*Total of 1 forms are submitted.

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



In re patent application of

Taketoshi Nakajima                          Confirmation No. 8111  
Serial No. 09/942,921                          Group Art Unit 2645  
Filed August 31, 2001                              Examiner Chow, Ming

For SYSTEM FOR PROVIDING NAME OF LOCATION AT WHICH  
CELLULAR PHONE TERMINAL UNIT IS LOCATED

Mail Stop AF  
Commissioner for Patents  
PO Box 1450  
Alexandria, Virginia 22313-1450

ATTACHMENT TO PRE-APPEAL BRIEF REQUEST FOR REVIEW

Sir:

This Pre-Appeal Brief Request for Review is being concurrently filed in the USPTO with a Notice of Appeal. A check is attached to satisfy the fees for a Notice of Appeal. If any additional fees are required to satisfy the fees due for the Notice of Appeal or to gain entry and consideration of this Pre-Appeal Brief Request for Review, the Commissioner is authorized to charge Attorney's Deposit Account 50-2041 (Whitham, Curtis & Christofferson).

**The Invention**

As discussed in more detail beginning on page 14 of the amendment filed February 22, 2005, each possible location of a cellular telephone will have a unique electric field signature or "fingerprint" which is based on measurements obtained from a plurality of base stations using a cellular phone. The cellular phone also determines report information that includes communication frequency and color code used by the base stations. In combination, in the context of the present invention, the combination of report information and electric field information determined using a cellular phone is collectively referred to as "report information".

Figure 5 of the application shows how a user registers a location name

with the location name server, while Figure 6 shows how a user of the location information service searches for the location of the cellular phone.

As explained on page 9 of the application, at lines 14 et seq., a cellular phone registers the “location name” using the keyboard on cellular phone (input the location name - step 41 in Figure 5) AND by measuring peripheral information using the cellular phone (step 42 in Figure 5). At step 43 in Figure 5, the location information entered with the keyboard and the peripheral information measured by the cellular phone are transmitted to a location name server, where it is received and registered. Subsequently, a message that the registration is completed is transmitted to the cellular phone (see steps 46 and 47). Thus, the location server builds up and maintains a set of paired “location name” and “peripheral information” (i.e., location X has peripheral information Y (where the location X is typed in and the peripheral information Y is measured data obtained by the cellular phone at location X)).

Figure 6 illustrates how this built up database can then be used for determining the location of a cellular phone. As explained on page 10, at lines 16 et seq., a user of the location information service causes the console 3 to transmit a “location name request” to a location name server 2, which then transmits a “peripheral information request” to the cellular phone 1. Once the “peripheral information request” is received, the cellular phone measures the peripheral information and transmits it to the location name server. Then, the database is accessed (step 58 in Figure 6) and the “location name” is determined by matching the measured peripheral information received at the location name server with “peripheral information” which is registered in the database. As explained on page 11, lines 11, et seq., the database used to obtain “a location name that is correlated with peripheral information that is the closest to the received peripheral information from the database”. The location name identified by this matching type operation is transmitted back to the location information console and presented to the user of the location information service.

Pages 11 et seq. of the application describe variations on the theme illustrated in Figures 5 and 6 which constitute different embodiments of the invention (e.g., having the console transmit directly to the cellular phone, using the cellular phone to access location name information or function as a location

name server, using periodic transmissions from the cellular phone to provide a history of where the cellular phone has been, etc.).

Thus, the described system provides a technique for determining location information without GPS, triangulation equipment, etc. When a location name server stores “peripheral information” and “location name” registered by a plurality of cellular phones, a user can obtain the location name of an unknown location (he can find out where he is simply using measured peripheral information which is matched to previously stored data). Proper names can be used in the database (e.g., OO company, OO station, etc.-see page 14 at line 2). Further, the accuracy is much higher than conventional location information service based on a location registration to a cell.

### **Errors and Omissions**

- 1) Each of the independent claims requires “a database” which includes “peripheral information and location names”, where the database is searched “for the name of the location corresponding to peripheral information” which is received from a cellular phone (claims 1, 3, 5) or contained in a location request (claim 6, 8, and 10). This feature is wholly lacking from all references cited, and would not be obvious from any combination of references cited.

Simply by referring to the front page of the principal reference of Sollee it can be seen that the reference contemplates locating a mobile phone in a particular area or “cell” referred to as a home zone 22. Sollee describes the homezone as a “geographical home area in which the wireless mobile station is to receive and original wireless calls at a predetermined low billing rate” (see column 1, lines 45 et seq.). Thus, Sollee does not equate a signal to a location name, and is completely unrelated to precise locations. With reference to column 2, line 28 et seq., it can be seen that Sollee contemplates determining if a phone is in a Homezone type call and that this is done at a gateway MSC. As should be understood, this passage demonstrates that the locationing is related to a geographic area, and is completely unrelated to a database with paired “location names” and “peripheral information”.

Also, simply by referring to the front page of Havinis, it can be seen that

Havinis contemplates use of a cell phone 20 in a cell 22, and that locationing is performed by “calculation” (see title of Havinis). Column 6, line 37 of Havinis discusses the use of a location calculation module. In short, Havinis has no database where there is paired location names and peripheral information, and relies on a completely different mechanism, relying on computation, transferring of files, etc.

Finally, simply by referring to the front page of Lee, it can bee seen that calculations and use of GPS information are used. Lee is specifically related to positioning a base station (see title). Lee has no database where there is paired location names and peripheral information.

Any combination of Sollee, Havinis and Lee would not make the claimed invention obvious to one of ordinary skill in the art. None of the reference discuss using a database or previously stored location names and peripheral information, and none of the references identify the location of a cellular phone by matching measured peripheral information against the peripheral information stored in a database and determining the location based on the best match. As such, the rejection of claims 1, 3-6, and 8-10 is simply in error and should be withdrawn.

Further, the rejection of claims 2 and 7 based on the Sollee, Havinis, Lee combination further in view of Mansour should also be withdrawn since Mansour does not make up for the deficiencies of the Solle, Havinis, and Lee combination. Mansour is related to increasing capacity of a telecommunications cell. Likewise, the rejection of claims 11 and 12 based on the Sollee, Havinis, Lee combination further in view of Tiedemann should also be withdrawn as it does not make up for the deficiencies of the Solle, Havinis, and Lee combination. Tiedmann is related to the handoff between communication systems.

2) There is no motivation to make the combination proposed by the Examiner.

The differences between the references cited are discussed above and in greater detail on pages 8 and 9 of the amendment filed September 29, 2005.

In the advisory action, the Examiner appears to have reasoned that because “wireless network functions are common to all” it would be obvious to combine the reference. However, such reasoning does not address the fact that locating a base station (Lee) is quite different from identifying if a phone is in a Homezone

(Sollee) or calculating the position of phone using a location calculation module (Havanis). Presumably, in both Sollee and Havanis, base stations are already in existence and locating them with Lee's technique would be unrelated. Further, combined Sollee with Havanis also is inappropriate since Sollee is only concerned with whether or not the cell phone is in a particular cell or homezone. It is not concerned with precisely where it is located and provides no mechanism for such a determination.

### **Conclusion**

In view of the above, it is requested that the position of the Examiner be reviewed, that the rejections be withdrawn, and that the application be awarded a notice of allowance.

Respectfully submitted,



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